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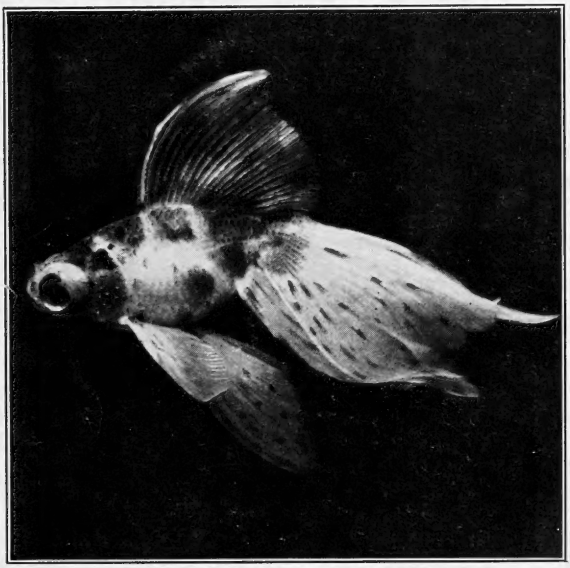

VEILTAIL TELESCOPE GOLDFISH
Half Life Size
Carassius auratus, var. chinensis pendulibicaudalis

MAY 1912

Vol. I

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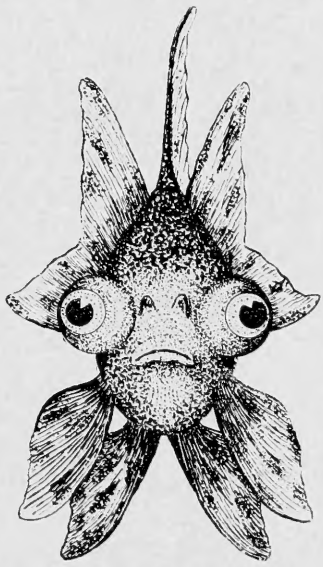

DRAWING BY H. T. WOLF

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From Our Exchanges

We have received the *Forty-third Annual Report* of the American Museum of Natural History, New York, February 5, 1912, and take from it the following (page 34):

"The exhibit of the Aquarium Society, the first of its kind, was held under various disadvantages, but attracted much interest, and was visited by over 5,000 people."

And again on page 51:

"In this connection (aquarium exhibits) we should mention the annual meeting and exhibition of the Aquarium Society, which was held in the Museum, under the auspices of the department. This was largely attended, and its contributors deserve great praise for the interest and importance of their exhibits. Many tropical fishes were shown which apparently had never before been brought living to America."

It should be noted, however, that this was the second exhibition of the New York Society, the first having been held in November, 1910, at the New York Aquarium in Battery Park, N. Y.

Among our exchanges is the *Nature-Study Review*, the official organ of American Nature-Study Society, a monthly published in Chicago, and edited by Elliot R. Downing, University of Chicago, one dollar per year. It covers the entire field of nature study. In the May number is an article on "The Insect Life of Pond and Stream," by Paul S. Welch.

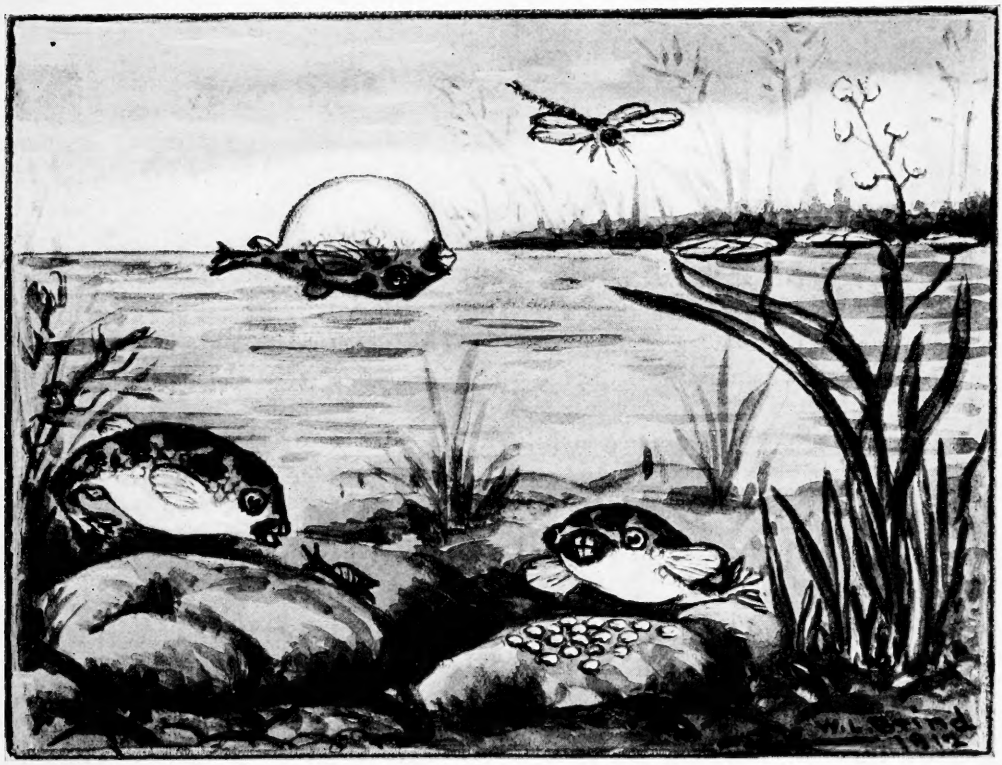
We have just received word that there has been formed an Aquarium Society in Milwaukee, Wisconsin.

A wedding or birthday present of an aquarium will be very acceptable. Get it from one of our advertisers.

Visitors are welcome at all meetings of the societies.

THE AQUARIUM

VOLUME I MAY, 1912 NUMBER 2



BALL FISH OR FROG FISH—(*Tetrodon cutcutia*)

The Ball Fish or Frog Fish

(Tetrodon cutcutia)

WALTER LANNOY BRIND
New York

This truly remarkable fish was first introduced into this country by me in the autumn of 1911, when a pair were shipped from Germany by a fishculturist who had bred them from parent fish which he had imported from India. My pair bred in the summer of 1911, in Germany, before being shipped to me, and bred twice after I received them in Chicago, where I formerly resided. Unfortunately my ball fish ate their eggs and the male eventually killed the female, so that I will have to import another pair and try again this coming summer. This fish is of a voracious nature, and must only be kept with his mate at actual spawning time. Thereafter the female must be at once removed. In India this fish is found in salt or brackish water, but lives and breeds happily in fresh water if kept at a uniform summer temperature—(75 to 80 degrees Fahrenheit). My wash-drawing shows exactly what the ball fish looks like. My pair were about two inches long and were one year old. There are no scales whatever on

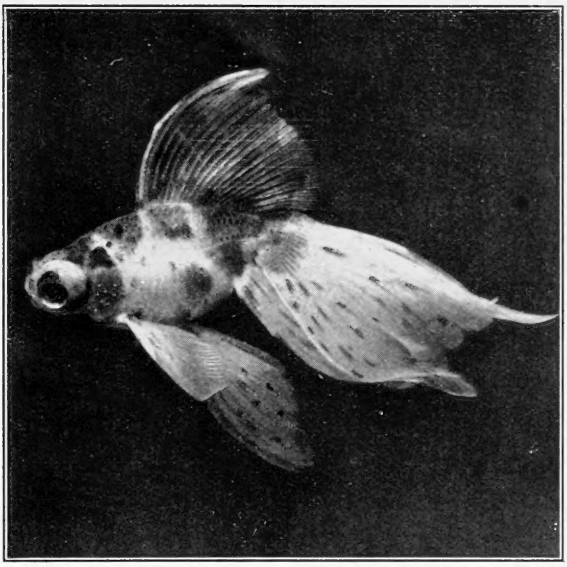
the skin, which is exactly like a frog's skin in texture and in color, a shade of olive green varying to olive brown, with black blotches and mottlings on back and sides, which markings become paler or darker at the will of the fish. The under parts are snowy white. There are no ventral fins at all. The rays in the tail are more suggestive of the toes in the hind feet of a frog—uneven in length—and when the fish is excited at breeding time he expands his tail, and it looks just like a pair of frog's feet held close together. The mouth has two projecting teeth in each jaw in front, like a rabbit or squirrel, with which the fish seizes and crushes small snails which are his favorite food. He waits until the snail sticks his head out, and will then grab it and shake it from its shell like a terrier worrying a rat! Then there will usually be a bit of snail-meat left in the bottom of the shell, and to get this he will crush the end of the shell. Ordinarily the ball fish swims with his *pectoral* fins—not with his tail as do most fish, he carries his tail curled up sideways. Only when alarmed will he straighten his tail, making a rapid rush away by flipping out his tail. If taken in the hand he makes a peculiar chattering noise by drawing in air rapidly through his teeth, and in a few seconds he has inflated himself as round as a ball and lies on his back motionless. If laid on the water he will float back downwards (owing to the weight of the backbone, etc.), and as soon as he thinks that the danger is past, he lets out the air rapidly, turns over and dives head foremost to the bottom. The eyes of the ball fish are bronze-blue, large and are moveable independently of each other. One eye will look up at you when you feed him a snail, while the other may look downwards or sideways. His breeding habits are very interesting. At spawning time the water should be warmer than normally—an ideal tropical aquarium should be used for breeding this fish, and the bottom should be covered with clay. There should be some large, smooth, flat stones provided and some small flowerpots (say three) laid on their sides, facing in different directions for hiding places for the female. A few plants (—Sagittaria) should be planted along the sides of the aquarium. If snails are scarce the ball fish will eat raw beef, fresh and finely scraped. Feed sparingly and be careful to remove with a dip tube any food that is not eaten at once. The eggs are large, clear, like glass, with a bright brown embryo clearly visible through the shell. They adhere to the surface of the flat stone on which they are deposited, being scattered all over its upper surface. The male fish hovers over the eggs, and fans the water over them constantly with his pectoral fins, so as to keep up a fresh supply of oxygen. According to temperature the young ones hatch out in from six to ten days, and are then carelessly swept aside by the fins of the parent fish, who do not bother about them at all. The adults may then be set together in another aquarium to breed again. I am not in favor of breeding them more than twice in a season, and as soon as the eggs are laid, I would remove the female or she may be bitten to death by the male. The young ones eat finely powdered fishfood. This fish is unquestionably the greatest curiosity among all known aquarium fishes, and it is to be hoped that some one will succeed in breeding some this summer, and will report his success in an article to this magazine.

About one hundred species of submerged aquatic plants, most of which are fit for aquarium use, occur in the U. S. east of the Rocky Mountains. Closer exploration of the Southern States will add more to this number.

Types of Goldfish

(The Veiltail Telescope)

Wm. T. Innes, Jr.
Philadelphia



VEILTAIL TELESCOPE GOLDFISH
Half life size
Carassius auratus, var. chinensis pendulibicaudalis
Photograph by the author

Among the advanced goldfish breeders today, the veiltail telescope rules king. It combines a greater number of points than any other fancy-bred fish, and in spite of the great numbers raised, perfect specimens are rare. In the centres where these fish are in demand the fancier possessing a fair-sized collection of fine specimens has an asset of positive value, for it can be converted into cash to better advantage than most personal belongings. It sounds like a figure of speech to say that a certain fish is worth its weight in gold. I have never gone into the matter accurately, but I am sure I have known a number of cases where twice the weight in gold would not match the price brought by these aristocrats of the aquarium. Fifteen to twenty-five dollars buys a fish considerably out of the ordinary class. These are prices frequently paid, but for fish which are perfect in all points and possess extraordinary coloring, one hundred dollars is by no means an unheard-of price, especially if the purchaser has the beginner's fever in violent form.

The veiltail telescope has been evolved independently in the United States and in Germany. The telescope fish was first bred in China or Korea, the peculiar monstrosity of protruding eyes being originally produced, it is believed, by shaking the eggs at a certain period of their development. The standard to which the Chinese worked was that of a body of moderate length, brilliantly colored or very black, eyes protruding violently, moderate length tail, fully divided, anal fins double. The fish was altogether grotesque, well in keeping with Chinese fancy, yet having a kind of beautiful ugliness not to be denied. The Japanese mind runs more to elegance and grace. They originated the type known as the fringetail, a fish with short body and extremely long fin development. The creation of a type of animal, like the making of a flower, is somehow deeply connected with the artistic genius or temperament of a people. The Americans and Germans are somewhat lacking in a definite national artistic life, but they have a genius for experimenting and for doing the difficult thing, whatever it may be. This has brought them to cross the Japanese fringetail and the Chinese telescope—two fish of very different characteristics—and try to retain all the points of both fish! They have succeeded very well indeed, but it is doubtful whether so much as one fish has ever appeared possessing the astonishing eye development and the vivid coloring of the originally imported Chinese telescope, together with the extreme fin development of the Japanese fringetail or veiltail, the latter being the name given the type with very broad, full tails, and which are the more difficult to breed. Those with long narrow tails are termed ribbontails.

The illustration accompanying this article was made from one of the best veiltail telescopes I have ever seen, yet expert judges will recognize that it is not perfect. The body is not as deep from top to bottom as it should be. Otherwise it is a remarkable fish. The dorsal fin is high and always erect. In being judged on points by the American system the dorsal fin would receive 15; the tails which are very broad, long and fully divided, 20; anal fins double 5; eyes protrude like small marbles from the head, and both of same size, 20; color, 20. It was extremely variegated in black, white, cream, yellow, lavender, blue, brown, red and pale gray. The photograph can give no idea of this gorgeous yet delicate sprinkling of color. Body 16 out of a possible 20, giving 96 out of a possible 100. The American system does not take into account the length of anal and pectoral fins, as they usually correspond with the tail. The fish was transparently scaled, but I have noticed that the scales show more in a photograph than they do to the eye in this type of fish. This was a male two years old, and was photographed in breeding season, as can be seen by the fact that the tubercles on the gill plate are plainly visible. The illustration is about half life size.

The Household Aquarium

(Concluded)

Sam'l McClary, 3d, M. D.
Philadelphia

The scavengers should be watched carefully, as dead ones pollute the water and cause trouble. Snails should be examined occasionally and mussels if toppt when alive will close their shells. About once a week or oftener, it is wise to use a dipping tube or siphon to remove the humus and precipitate, which collect on the bottom, and it will nearly all be found in the depression previously mentiond, so it is easily removed. Tadpoles and snails remove a large amount of this material. I believe we should have at least one good-sized snail for each fish and preferably two or three. Tadpoles are not lookt upon very favorably by me, as they stir up the lower layers too much and scatter the debris but if used, one for every two or three fish is sufficient.

Mussels keep the water clear of small particles and to a certain extent act as a constant filter. Feeding is a very important matter and should be taken up in detail in a subsequent paper. Most foods are too concentrated, that is they have not enuf bulk for the amount of nutrition containd, and frequently cause constipation. I find the following recipe makes a very satisfactory general food. Take cornmeal flour, one pound; Bethlehem oatmeal, one pound; shredded codfish, one pound; four eggs, table salt, a tablespoonful; epsom salts, a tablespoonful; mix thoroughly and add enough water to make a paste, steam four hours, then dry thoroughly in the oven after it has been spread out in thin layers in pans. After it is dried it may be ground up in an ordinary kitchen food chopper. in pans, after it is dried it may be ground up with an ordinary kitchen food chopper. One food should not be used constantly, but should be varied by using other foods at intervals. Most people feed entirely too much and too often, once every other day is enuf in Winter and once a day in Summer for fish over six months old, younger fish should be fed oftener. No food should remain fifteen minutes after it is given. It should not be allowd to float around promiscuously. A good plan is to have a large circular piece of cork directly above a bare space on the bottom and drop the food into this so that when it sinks it will not lodge on plants or be hidden to ferment and decompose. Live food such as daphnias should be fed whenever it is possible to get them.

I have already mentiond the dipping tube and siphon. The net is very im-

portant, those commonly sold in stores are too rough and often injure fish, bobinet makes a good soft material for this use. The net should always be used slowly and carefully, as many beautiful tails, fins and even eyes are injured by careless handling of the net. Scissors are useful to trim plants and it is much better to cut than to break or tear them. Thermometers are almost a necessity, in order to regulate the temperature of the water, especially when transferring fish from one receptacle to another. Fine fish should not suffer a sudden change of more than four or five degrees.

In closing I wish to emphasize two points: Be clean, sterilize everything possible. Disinfect all plants and animals before adding them to the aquarium, and even then, if possible, use a quarantine for a week or ten days on new inmates. Second, Get all conditions as near nature as possible and you may expect success.

Feeding Aquarium Plants

(Concluded)

S. Chichester Lloyd
Brooklyn, N.Y.

I washed all the plants and emptied every tank of its gravel. The gravel I boiled in big washboilers—about half a ton of it. I also decided to never again undertake such a big job all at once if I could help it. I next bought a lot of shallow fern dishes of red pottery, about two and and a half inches deep, some deeper, and about five inches across the top. Into these, after giving them a thoro soaking over night, I put a piece of broken pot over the hole in the bottom, and then a thin layer of gravel, on top of which I spread a full (not heaping) teaspoonful of dry pulverized sheep manure, then filling to the top with boiled gravel. Into these pots I inserted my plants as closly as possible avoiding crowding. These pots I placed as closely together as each aquarium would hold, and scattered a thin layer of gravel over the floor of the tanks, so that the fish could not empty the pots. Now here is the point for the wise aquarist who wants healthy fish and beautiful growth of plants: In three weeks after the re-planting, the glass of the aquariums exposed to the sunlight had a magnificent growth, over an inch long, of beautiful green algæ. Tanks without a vestige of sunlight ever reaching them did the same in a slightly longer period, while the pots themselvs were covered with this long moss, the red color entirely hidden. The floating anacharis had thrown down a perfect forest of white roots and the tanks are today in an ideal condition and the fish apparently never in better health. Even the Japanese Snails are growing moss on their backs, and the Sagittaria is sending shoots from one pot to root in the next.

Each week I pour into each tank a half glass of the water from a tablespoonful of sheep manure dissolved in a quart jar of water, every third week I omit it. I cannot recomend this too highly for anybody who wants algæ, and oxygen. For raising daphnia it cannot be exceld. A tub of water with some anacharis, a couple of quarts of sheep manure water and about a glass of daphnia will be alive with daphnia in ten days. The excess of algæ on the front glass of aquaria can be rubbed off with cotton or a piece of rough toweling on an old toothbrush attached to a long handle.

I regard sheep manure as stimulating and nourishing for both plant, insect and fish life, and find that I am no longer troubld with black soil or decayed roots. Once a month I siphon off the refuse on the bottom of the tanks and replace with fresh water, if I happen to have the time. I have tried soil and all kinds of sand and mixtures, but soil from ponds frequently contains leeches and garden soil generates too much gas. I am very much pleasd with the results of the use of sheep manure, and if my experience may be of help to any fellow members I shall be glad to hear of it.

THE AQUARIUM

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VOL. I MAY, 1912 No. 2

Our first number was issued in April, and judging from results up to the present day, was well received, not only by our membership, but also by others interested in the subject. So far no adverse opinions have been heard. It is, of course, entirely too early to say more at this time than that the outlook is most flattering. Hard work on the part of all concerned, though is of first importance to make the venture a success.

A matter of which brief mention will be made is the adverse stand taken by some of our members and friends on the "new spelling" used in some of the articles. References to this feature under the remarks of "Josh Billingsism," etc., have invariably been put into the waste basket, as no person with the slightest regard for truth can compare new spelling to any such oddity. Only ignorance, both of changes of language and of history is excusable for such expressions, and there is doubt whether many people who abhor "maltreating the language of Shakespeare" are even capable of reading that same language as written at the time of the Tudors.

But as we are an aquarium magazine we cannot go into any extraneous matters, and as we want to reach the schools, we are compelled to return to orthodox spelling, trusting the time may not be far off when the Anglo-Saxon type of mind can see the wisdom of spelling reform and of thereby placing English in the forefront for the claim of the coming *world tongue.*

Some of our articles having been already set up, will still appear in the newer form in this number, but hereafter it will be regular school style.

Owing to the removal of our publishers, Messrs. Innes & Sons, to their new quarters, at 12th and Cherry Streets, as well as for other reasons, the issue of the magazine for this month has been somewhat delayed. We will do better next month.

A Simple Aeration Apparatus

FRED. G. ORSINGER
Chicago

Since it is essential, in many instances, to aerate an aquarium, the description of a cheaply constructed outfit will doubtless prove of interest to many. Such an apparatus can be made by taking a new five-gallon oil can, re-soldering its joints and then soldering into the side near the bottom a bicycle tire valve. To the spout of the can attach a piece of rubber tubing of a length sufficient to reach the bottom of the aquarium from wherever the can is set. Into the other end of the tube insert a short piece of lead tubing, the free end of which has been squeezed together, leaving a slit-like aperture.

To operate the apparatus, connect a bicycle pump to the valve, pump in a reasonable amount of air (not enough to burst the rubber tubing) and then regulate the flow of air by contracting the slit in the lead tip till a fine mist-like spray is obtained. A can full of air should last for half a day.

About 400 species of fresh water fishes occur in North America, (United States, Canada, and temperate Mexico).

Society Statistics

According to a list published in the 1912 *"Kalender fuer Aquarien—und Terrarien Kunde,* of the *Kosmos Society of Nature Friends,* of Stuttgart, Germany, the following number of aquarium societies are known in Europe:

Austria	22	Hungary	1
Belgium	1	Luxemburg ...	1
Denmark	1	Russia	3
Germany 127		Sweden	1
Holland	5	Switzerland ...	7

This list is evidently incomplete, as no societies are mentioned from the British Empire, France, etc., although these nations are known to be great friends of nature and out-of-door life.

Aquarium Fish Food

C. J. Heede
Brooklyn

Many of the prepared fish foods now on the market I have found to be as good, if not better, than any imported foods, but in feeding, it must be taken into consideration that they are very rich and concentrated, and that they must be used sparingly. If many large snails are kept with the fishes it will be necessary to allow some food for the snails.

The natural foods, Daphnia, Cyclops, Cypris, Polyphemus and worms are of course the best, but aside from these, fish eggs, raw or boiled, finely scraped fish flesh, of either the fresh or salt water varieties, oysters, clams, shrimp, or lobster meat, smoked fish, such as herring, whitefish or salmon, can be used with more or less success. After these come animal foods such as beef, veal, and lamb, or game of any sort, used either raw or boiled, but in all cases scraped, or dried and pulverized. A good food for all small fish or fry that have past the yolk-sac stage is the yolk of a very hard-boiled egg, fed in a fluid or powdered state.

When fishes are fed with meat care must be taken to have it cut or scraped into minute particles, otherwise some fish too eager for it will try to swallow big pieces and choke to death.

Along the Morris Canal

Eugene Smith
Hoboken, N. J.

The Morris Canal runs across the State of New Jersey from tidewater at Jersey City to the Delaware River at Phillipsburg—Easton. It was one of the first canals constructed in the United States and has become an elephant on the hands of the State, since its abandonment by the canal company. Several railroad companies have been pulling wires to get control of it and there was talk of turning it into a speeding course. There is also a proposition to make of it a public parkway and course for water sports.

It is the last proposition which appeals to many of us of the metropolitan district who have fished and picnicked along it. Many a holiday have we passed along its quiet banks from Newark, past Paterson and Little Falls and up into Morris County. At all seasons of the year from early spring till the ice shut us out, as long as there was water in the canal, we have visited it and gathered of its treasures. It is remarkable how different the results of collecting are at various places and on different days, even in so placid a stream as this canal. For some miles northward of Newark mostly common sunfish (*Eupomotis gibbosus*) the most plentiful of all the sunfishes, and, I may say, of all our local Eastern fishes, as well; shiners (*Abramis crysoleucas*) common, but beautiful; the freshwater killifish (*Fundulus diaphanus*), ever active, and the hornpout or catfish (*Amciurus nebulosus*), with each mile further on the number of fishes increases as they may enter the canal, perhaps from some small streamlet, or the overflow of a pond situate at about the same level.

The horned dace (*Notropis cornutus*) of the beautiful fin, also, though very rare in the canal, the dainty satin fin (*N. analostanus*) and the little minnows *N. bifrenatus* and *N. procne* if these two be not one and the same species. Here also occurs the Oswego or large-mouth bass (*Micropterus salmoides*) in occasional isolation; its nearest cousin the small-mouth black bass (*M. dolomieu*) is very scarce, even for while a perch (*Perca flavescens*) is caught, while the rock bass (*Ambloplites rupestris*) is almost as common as the ordinary sunfish. Along the weedy edges is found in plenty that little gem, the brown or spotted fin sunfish (*Enneacanthus gloriosus*). Not so common is the tadpole, stone cat or "mad tom" (*Schilbeodes gyrinus*) and indeed very rare *S. insignis*. The long-eared sunfish (*Lepomis auritis*), fairly plentiful and one of our most beautiful fishes, is always welcome and repays its keeper by its robustness.

The coppernose or blue gill sunfish (*L. pallidus*) is found only as a rarity, and while other fishes from the interior of the State come down the canal, this fish, for some reason, travels this way only exceptionally. The summit level of the canal is Lake Hopatcong, 926 feet over tide, the main feeder next to this comes from Greenwood Lake, some twenty miles away. All fishes therefor which occur in these two lakes are likely to be found in the canal, though some appear very rarely. Among these are silver chub (*Semotilus corporalis*) and the creek chub (*S. atromaculatus*).

Far too common are the pickerel, the bloodhounds of the rivers, *Lucius reticulatus* and *L. americanus*. The little tesselated darter (*Boleosoma nigrum olmstedi*) flits like a ghost over the sandy inclines, occasionally associated with very young brook suckers (*Catostomus commersonii*). Calico bass, blacknosed dace, mud minnows and several other fish are hardly ever found in the canal though they occur in neighboring waters. Turning from the fishes we find the frisky little newt, our only truly aquatic salamander (*Diemyctylus viridescens*), usually among the plants, and what fine plumes of milfoil (*Myriophyllum spicatum* and *M. verticillatum* one may find in the spots which originally were swampy places and now are pools, often quite deep.

The pond weeds, especially the broad-leaved (*Potamogeton amplifolius*), the perfoliate (*P. perfoliatus*) and others soon grow to dense thickets, also the *Anacharis* and *Vallisneria spiralis*, affording shelter and spawning fields for all sorts of animals. Besides the common floating and climbing snails *Physa, Lymnaea, Planorbis* and others, are also found the burrowing ground snails, of which *Melantho decisa* and *Goniobasis virginica* are the most usual. Mussels, too, are common in the muddy bottom. After walking and fishing along the canal for many an hour, the close of day would find us often miles away from railroad or trolley car, and steps had to be retraced along the same path. For ease of operations in fishing, the canal cannot be excelled, so that ladies on occasion were in the parties, enjoying the outing as much as the men. On such trips, of course, lunch is part of the outfit, and a plain meal under such circumstances never lacks flavor, and is eaten with such relish as would make dyspeptics envious. But then no true lover of nature has time ever to become dyspeptic.

The members of the New York and Brooklyn societies would regretfully see the old canal used for anything but a waterway, and would use all their good endeavor to help along the movement to preserve it. Anyone who has seen the fleets of the canoeists glide over the canal on a bright Sunday morning, or who has seen the lovers strolling on its banks, will agree with the aquarists, that the old canal should for all time become a public pleasure ground.

Mechanical Helps in Aquarium Work

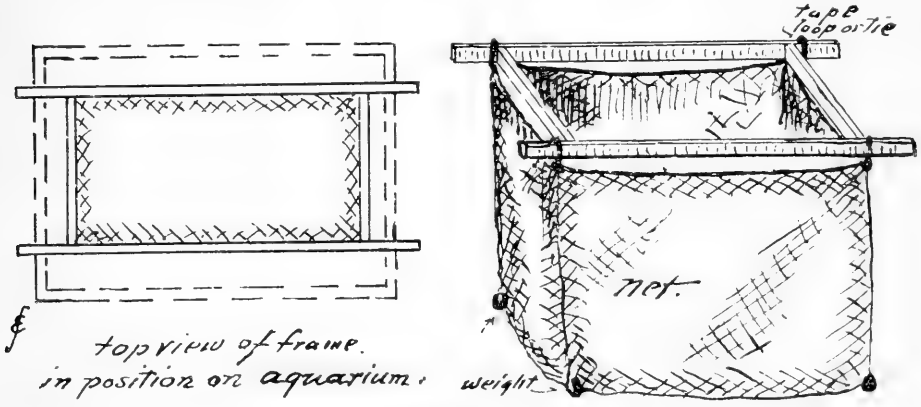
The Spawning Net

Wm. T. Innes, Jr.
Philadelphia

In selecting topics for this series of articles, efforts will be made to have them appropriate to the season as far as possible.

The most important thing in the calendar of the average aquarium enthusiast just now is the spawning of goldfish, and we are taking up in this issue a very ingenious and useful device to be used in this connection—the spawning net.

This is the idea of Mr. A. T. Coles, of Glenside, Pa., and is designed principally for the use of those not having an abundance of spawning tubs or other vessels. It is simply a cheesecloth bag, open at the top and suspended by a frame in the aquarium. The bag is tied to the frame by bow knots and the four lower corners weighted down. For this purpose I use lead skirt weights which may be had at department stores, but any weight of about half an ounce will do. The suspending frame may be made very simply of any light sticks, either nailed or tied together.



SPAWNING NET

When goldfish are preparing to spawn they usually give fair notice of that occurrence. The male as a rule "drives" the female occasionally for several days and almost always increases the driving the evening before spawning takes place. At this time it behooves the interested fancier to go to bed early, for he can hardly arise before the real business of spawning has started. Daybreak or earlier is the fishes' favorite time.

At this season have plenty of water hyacinths or myriophyllum on hand. When the fish are found to be spawning, sink the net in the water, allowing the wooden frame to be supported on the edges of the aquarium. Put plants in plentifully and then introduce the female and such males as are selected. Here they will continue to spawn. As fast as the plants are somewhat covered with eggs they should be removed to water of equal temperature, allowing, of course, a few minutes for them to become fertilized.

When the fish cease to drive and spawning is complete, which is usually about eleven in the morning, remove fish from net, put plants with eggs in hatching pans, untie net from frame and if there are eggs adhering to that, turn it inside out and place it into the hatching pan also.

It is well to have other nets in readiness, as other spawnings may occur before the first lot of eggs are hatched out.

Some of the advantages of this method besides saving space are these:

There is no risk of changing temperature on the breeding fish.

The usual dirt stirred up by spawning fish and which settles on the eggs is eliminated.

No idle females are about to eat the spawn.

No eggs are lost by dropping to the bottom. Those falling to the bottom of the net are as good as those on the plants.

SOCIETY BULLETINS

Brooklyn Aquarium Society

Regular meetings are held on the Fourth Friday in every month except June, July and August, at Fairchild Building, 702 Fulton St., at 8 P.M.

Initiation Fee, $1.00
Annual Dues, $2.00

Officers for 1912

President
W. F. DeVoe, Box 383, Baldwin, N.Y.
Vice-President
Dr. Rudolph C. Lienau
Local Editor, Sylvester C. Lloyd
924 Gates Avenue

Corresponding and Recording Secretary
Owen H. Smith, 52 Wall St., New York
Treasurer
Harry Roessle
Financial Secretary
Theodore P. Fritz
Local Business Manager, Owen H. Smith
702 Fulton Street

At the April meeting, Friday, April 26th, the following prizes were awarded: 1st Prize (Blue Ribbon), Herman Rabenau for Xyphophorus helleri; 2d Prize (Red Ribbon), Dr. Rudolph C. Lienau for Gambusia holbrooki; 3d Prize (White Ribbon), Mrs. Meyer for Mollienesia formosa. At the May meeting we vote on changing the meeting day from the last Friday to the last Tuesday of each month, so that members who belong to other societies may be enabled to attend the meetings of our society.

May 24th Competition: Labyrinth Fishes, Old-fashioned Telescope Goldfish; also awards to be made for best balanced Household Aquarium and best arranged and stocked Terrarium

An auction for the benefit of the Society development fund will be held on this date, the object being a completely stocked all-glass aquarium, fish, plants and tank; a gift from two members. This being the final meeting of the season, a large attendance is desired.

The Society expects to have as its honored guest at the next meeting, May 24, 1912, Mr. Hugo Mulertt, the well known authority and pioneer on "Aquarium Fish Culture in America."

Chicago Fish Fanciers' Club

Regular meetings are held on the Second and Fourth Wednesday of each month, at 729 Stock Exchange Building, La Salle and Washington Streets, at 8.30 P.M.

Initiation Fee, $1.00
Annual Dues, $1.00

Officers for 1912

President	F. S. Young, 428 West 66th Street
Vice-President .	Dr. G. A. Preusker, 457 North Avenue
Secretary . .	F.G.Orsinger, 123 South Oakley Boulevard
Treasurer . .	Carl Fossetta, 1500 Diversey Buulevard
Librarian . .	Tracy H. Holmes, 2816 Logan Boulevard
Local Editor .	Tracy H. Holmes, 1522 Rockwell Street
Local Bus. Mgr.	J. G. Pieser, 3800 Grand Boulevard

Wednesday, May 22, at 8.30 P. M. Subject: "Microscopic Live Food," by W. A. Poyser.

June 12, at 8.30 P. M. Subject: "Devices for Collecting Specimens."

Both meetings to be held at Rooms 809-12 City Hall Square Bldg., 127-139 N. Clark St.

New York Aquarium Society

Regular meetings are held on the Second Thursday at the German-American School, Sherman Ave., Jersey City, and on the Fourth Friday at the American Museum of Natural History, 77th St. and Central Park West, New York, each month except July and August.

Initiation Fee, $1.00 Dues, $2.00

Officers for 1912

President . . Isaac Buchanan, 143 Liberty Street, New York
Vice-President, Richard Dorn, 7 Norman Rd., Upper Montclair, N.J.
Recording Secretary, Arthur Osborn, 42 South St., Jersey City, N.J.
Cor. Sec'y, Rev. Henry S. Coffin, 129 East 71st St., New York
Treasurer, H. A. Richtberg, 85 South 16th St., East Orange, N.J.
Librarian, Hermann Hoffmeister, 165 Webster Av., Jersey City, N.J.
Local Editor, John Treadwell Nichols, Am. Museum of Nat. Hist.
Local Business Manager, Carl P. Ording, 1931 Broadway, New York

May 24th: New York Meeting. Mr. I. Buchanan will show slides of his Tropical Fishes, photographed by Dr. E. Bade. Explanatory remarks by Mr. Richard Dorn.

June 13th: Jersey City, last business meeting of the season.

Philadelphia Aquarium Society

Initiation Fee, $1.00 Annual Dues, $1.80
Corresponding Membership $1.00 Annually

Officers for 1912

President and Local Editor, Wm. T. Innes, Jr., 12th & Cherry Sts.
Vice-President . . . Charles Paxson, 2521 N. 9th Street
Treasurer . . . . . Fred Schaefer, 1610 N. 2d Street
Secretary and Bus. Mgr., Howard S. Crees, 3744 N. 13th St.

AWARDS APRIL 24, 1912, (Fringetails under one year)

Scaled fish, (Blue Ribbon), to Mr. Schrack
(Red Ribbon), to Mr. Bausman
(White Ribbon), to Mr. Bausman

Scaleless fish, (Blue Ribbon), to Mr. Schaefer
(Red Ribbon), to Mr. Walp
(White Ribbon), to Mr. Schrack

Next meeting, September 25